

#### ABSTRACT OF THE DISCLOSURE

Six magneto-resistance segments are formed by film-forming on a signal processing circuit part consisting of an IC chip and are disposed in a predetermined rotation direction of a magnetic moving body, symmetrically about the centerline of a magnet perpendicular to that rotation direction.

Two pairs of magneto-resistance segments, whose pitch centers are positioned symmetrically with respect to the centerline of the magnet, form first and second bridge circuits, and the remaining pair of magneto-resistance segments, which has its pitch center on the centerline of the magnet, forms a third bridge circuit.